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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,946	08/18/2003	James W. Ryan	JR-14000-CON	4300

7590

10/17/2006

Cheryl H. Agris, Ph.D.
P.O. Box 806
Pelham, NY 10803

EXAMINER

ZARA, JANE J

ART UNIT	PAPER NUMBER
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1635

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/642,946	Applicant(s) RYAN, JAMES W.	
	Examiner Jane Zara	Art Unit 1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-16 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) 7,9,12,13 and 23-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,8,10,11 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1-29-04</u> . | 6) <input checked="" type="checkbox"/> Other: _____ |

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DETAILED ACTION

This Office action is in response to the communication filed 9-7-06.

Claims 1-4, 6-16, 23-26 are pending in the instant application.

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-4, 6, 8, 10, 11 and 14-16, and SEQ ID No. 6 in the reply filed on 9-7-06 is acknowledged. The traversal is on the ground(s) that Groups II-IV are ultimately linked to the claims in Group I and are subject to the right of rejoinder one there is indication of allowable subject matter of Group I. Applicant also argues that no undue burden would exist to search all of the sequences originally claimed in addition to the elected sequence. This is not found fully persuasive because the searches required for proper examination of all of the sequences and all of the different methods claimed would be burdensome to the examiner and, even though the searches of the prior art and appropriate data bases for some of the sequences and groups might be overlapping, they would not be coextensive. Applicant is correct that the linking claims would be rejoined upon allowance of the elected Group, provided that the methods were commensurate in scope with the allowed composition claims.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7, 9, 12, 13, 23-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there

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being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9-7-06.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4, 6, 8, 10, 11 and 14-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are drawn to compositions comprising isolated genomic nucleic acid molecules having a nucleotide sequence at least 95% identical to any polynucleotide encoding the polypeptide of SEQ ID NO. 3, or any nucleic acid molecule that hybridizes to these polynucleotides, and isolated nucleic acids comprising at least 20 nucleotides that hybridize with high stringency to an intronic region of SEQ ID No. 6.

The specification, claims and the art do not adequately describe the distinguishing features or attributes concisely shared by the members of the genus comprising these nucleic acids that are at least 95% homologous to any polynucleotide that encodes the polypeptide of SEQ ID NO. 3, or nucleic acids

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that specifically hybridize to them, or any polynucleotide that stringently hybridizes to the intronic sequences of SEQ ID No. 6. The specification teaches the sequence of SEQ ID No. 6, encoding the polypeptide of SEQ ID NO. 3. The genus of nucleic acids claimed, however, encompasses a myriad of structures (e.g. thousands and thousands of nucleic acid sequences) and the specification and claims do not adequately teach a representative number of species for the broad genus claimed, and which provide for the function claimed, of having human adipocyte enhancer binding protein 1 activity.

Concise structural features that could distinguish structures within the genus from others are missing from the disclosure. No common structural attributes identify the members of the claimed genus, and distinguish members within the claimed genus from those outside of it, and which provide for the function claimed, of having human adipocyte enhancer binding protein 1 activity. One of skill in the art would reasonably conclude that the disclosure fails to provide a representative number of species to describe the genus claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Layne et al.

Layne et al (J. Biol. Chem., Vol. 273, No. 25, pages 15,654-15,660, 1998) teach compositions and methods of recombinant polypeptide expression in vitro comprising the nucleic acid encoding the polypeptide of SEQ ID NO. 3 and further comprising a carrier (e.g. water), as well as an expression vector and recombinant host cells comprising the nucleic acid encoding the polypeptide of SEQ ID No. 3 (see the abstract on p. 15,654, text on p. 15,655, fig. 1 on p. 15,656, discussion on pp. 15,658-9. See also the accompanying alignment between SEQ ID No. 3 of the instant application and AF053944 of Layne et al).

Claims 8 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Noonberg et al.

Noonberg et al (USPN 5,624,803) teach a compositions comprising a polynucleotide at least 20 nucleobases in length that specifically hybridizes under stringent condition with an intronic sequence of SEQ ID NO. 6 and further comprising a carrier, water (see the accompanying sequence alignment data between nucleotides 3002-3237 of SEQ ID NO. 6 and SEQ ID No. 20 of

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Noonberg et al. In the alignment data, nucleotide no. 3002 of SEQ ID No. 6 = nucleotide no. 1).

Claims 8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Denney et al.

Denney et al (USPN 5,972,334) teach a compositions comprising a polynucleotide at least 20 nucleobases in length that specifically hybridizes under stringent condition with an intronic sequence of SEQ ID NO. 6 and further comprising a carrier, water (see the accompanying sequence alignment data between nucleotides 1967-2208 of SEQ ID NO. 6 and SEQ ID No. 35 of Denney et al. In the alignment data, Nucleotide no. 3002 of SEQ ID No. 6 = nucleotide no. 1).

Conclusion

Certain papers related to this application may be submitted to Art Unit 1635 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. ' 1.6(d)). The official fax telephone number for the Group is **571-273-8300**. NOTE: If Applicant *does* submit a paper by fax, the original signed copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jane Zara** whose telephone number is **(571)**

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272-0765. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras, can be reached on (571) 272-4517. Any inquiry regarding this application should be directed to the patent analyst, Katrina Turner, whose telephone number is (571) 272-0564. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jane Zara
10-10-06

J Zara
TC1600

JANE ZARA, PH.D.
PRIMARY EXAMINER

260	Db	TTCTGTCTGAGAGTCTAGAACCTCTGACGCCCGCGGAGGAGCGACTGTGAGGCGCCCGCGCTCTCC	319
61	Qy	GlupProThrProArgValArlqLysAlaGlnAlaGlyLysProGlyLysArgProGly	80
320	Db	GAGCCACCCCGCGGTCCGAAAAGCCAGCGCGGGGGCAAGCAGGGAAGCGCCAGGG	379
81	Qy	ThrAlaAlaGluValProProGluLysThrLysAspLysGlyLysLysGlyLysLysAsp	100
380	Db	ACGGCCGAGAGTGCCTCCGGAAAAGACCAAGACAAAGGGAAGAAAGCAAGAAGAC	439
101	Qy	LysGlyProLysValProLysGluSerLysGluGlySerProArgProProLysLysGly	120
440	Db	AAAGGCCCCCAAGGTGCCAAGAGTCTCTGGAGGGTCCCCCAGGCGCCCAAGAAGGGG	499
121	Qy	LysGluLysProProLysAlaThrLysLysProLysGluLysProProLysAlaThrLys	140
500	Db	AAGGAGNAGCCACCCAGGGCCACNAGAGGCCNAGGAGNAGCCACTAAGGCCACCAAG	559
141	Qy	LysProLysGluGluProProLysAlaThrLysLysProLysGluLysProProLysAla	160
560	Db	AAGCCCAAGGAGGAGCCACCCAGGCCACCAAGAGGCCAAGAGAGCCACCCCAAGGCC	619
161	Qy	ThrLysLysProProSerGlyLysArgProProLysLysAlaProSerGluThrLysGlu	180
620	Db	ACCAAGAGGCCCGGTGAGGAGAGAGGCCCCCATTTCTGGCTCCCTCAGAAACCTTGGAG	679
181	Qy	TrpProLysProProProSerProGlyProGluGluLysProGlnGluGlyLysAla	200
680	Db	TGGCACTTGCCCCACCCCCCAGCCCTGGCCCCGAGGAGCTACCCNAGGAGGAGGGGGG	739
201	Qy	ProLysSerAsnAsnTrpGlnAsnProGlyLysGluThrHisValGluAlaGlnGluHis	220
740	Db	CCCCTCTCAAAATCTGCAGNATCCAGGAGAGGAGACCCATGTGGAGGCACAGGAGCAC	799
221	Qy	GlnProGluProGluGluGluThrGluGluLysProThrLysAspTyrAsnAspGlnLysGlu	240
800	Db	CAGCTTGAGCGGAGGAGGAGACCGAGCAACCCACACTGGACTACATGATCCACAGATCGAG	859
241	Qy	ArgGluAspTyrGluAspPheGluTyrIleArgArgGlnLysGlnProArgProProPro	260
860	Db	AGGAGGACTATGAGHACTTTTGAATCATTTGGCGCCAGAAAGCAACCCAGGCCACCCCCA	919
261	Qy	SerArgArgArgProGluArgValTrpProGluProProGluGluLysAlaProAla	280
920	Db	AGCAGAGGAGGAGGCCCGAGCGGGTCTGGCCAGAGCCCCCTGAGGAGAGGCCCCCGGCC	979
281	Qy	ProAlaProGluGluArgLysGluProProValLysProLysLysProLysProLysProPro	300
980	Db	CCAGCCCGGAGGAGAGGATTTGAGCCCTCTGTGAAGCCTCTGTGTGCCCCCGCTGCCCT	1039
301	Qy	AspTyrGlyAspGlyTyrValIleProAsnTyrAspAspMetAspTyrTyrPheGlyPro	320
1040	Db	GACTATGGTATGGTTACGTGATCCCCAACCTACCATGACATGGACTATTACTTTGGCGCT	1099
321	Qy	ProProProGlnLysProAspAlaGluArgGlnThrAspGluGluLysGluGluLysLys	340
1100	Db	CCTCGCCCCCAGAGCCCGATGCTGAGCGCCAGACGACCAAGAGAGAGGAGGAGTGAAG	1159
341	Qy	LysProLysLysGluAspSerSerProLysGluGluThrAspLysTrpAlaValGluLys	360
1160	Db	AAACCCAAAAGAGGAGGAGCAGCAGCCCCCAAGGAGGAGACCGCAAGTGTGGCAGTGGAGAAG	1219
361	Qy	GlyLysAspHisLysGluProArgLysGlyLysGluGluGluGluGluGluGluTrpThrProThr	380
1220	Db	GGCAAGGAGACCAAAAGAGCCCGAAAGGGCGAGAGTTGGAGGAGGAGTGGACGCCCTACG	1279
381	Qy	GluLysValLysCysProProLysMetGluSerHisArgIleGluAspAsnGlnIle	400
1280	Db	GAGAAAGTCAAGTGTCTCCCCCATTTGGATGGAGTCACACCGTATTAGGACCAACAGATC	1339
401	Qy	ArgLysSerMetLeuArgHisGlyLysGluGluAlaGlnArgGlyArgLeuAsnMetGln	420
1340	Db	CGAGCTCTCTCATGCTGCGCAGCGCTGGGGGACAGCGCGCGCGCTCAACATCGAG	1399

Qy	421	ThrGlyAlaThrGluAspAspTyrTyrAspGlyAlaTTrpCysalGluAspAspAlaArg	440
Db	1400	ACCGGTGCCACTCAGGACGCACTACTATGATGGTGGCGTGGTCCGAGGACGATGCCAGG	1459
Qy	441	ThrGlnTrpIleGluValAspThrArgArgThrArgPheThrGlyValIleThrGln	460
Db	1460	ACCCAGTGGATAGAGGTGGHACACGAGGAGCACTACCGGTTTCCAGGCGTCAACCCAG	1519
Qy	461	GlyArgAspSerSerIleHisAspAspPheValThrThrPhePheValGlyPheSerAsn	480
Db	1520	GGCAGAGACTCCAGCATCCATGACGATTTTGTGACCACTTCTTCGTGGCGCTTCAGCAAT	1579
Qy	481	AspSerGlnThrTrpValMetTyrThrAsnGlyTyrGluGluMetThrPheHisGlyAsn	500
Db	1580	GACAGCCAGACATGGGTGATGATACACCAACCGGCTATGAGGAATAGACTTTTCATGGGAAC	1639
Qy	501	ValAspIysAspThrProValLeuSerGluLeuProGluProValValAlaArgPheIle	520
Db	1640	GTGGACAAGGACACACCCGCTGCTGAGTGAGCTCCACAGAGCCGGTGGTGGCTCGTTTCATC	1699
Qy	521	ArgIleTyrProIleThrTrpAsnGlySerLeuCysMetArgLeuGluValLeuGlyCys	540
Db	1700	CGCATCTACCCACTCACCTGGAATGGCAGCCTGTGCATGCGCCTCGGAGGTGCTGGGGTGC	1759
Qy	541	SerValAlaProValTyrSerTyrTyrAlaGlnAsnGluValValAlaThrAspAspLeu	560
Db	1760	TCTGTGGCCCTCTGTACACTACTACGACACAGATGAGGTGGTGGCCACCGATGACTG	1819
Qy	561	AspPheArgHisHisSerTyrLysAspMetArgGlnLeuMetLysValValAsnGluGlu	580
Db	1820	GATTTCCGGCACACACAGCTACAAGGACATGCGCCAGCTCATGAAGTGGTGAACAGAGAG	1879
Qy	581	CysProThrIleThrArgThrTyrSerLeuGlyLysSerSerArgGlyLeuValIleTyr	600
Db	1880	TGCCCCACCATTACCCGCATTACAGCCTGGGCAAGAGCTCACGAGGCCTCAAGATCTAT	1939
Qy	601	AlaMetGluIleSerAspAsnProGlyGlyHisGluLeuGlyGluProGluPheArgTyr	620
Db	1940	GCCATGGAGATCTCAGACAACCCCTGGGAGCATGAACTGGGGGAGCCGAGTTCCCGTAC	1999
Qy	621	ThrAlaGlyIleHisGlyAsnGluValLeuGlyArgGluLeuLeuLeuLeuMetGln	640
Db	2000	ACTGCTGGGATCCATGGCAACAGAGGTGCTGGGCCGAGAGCTGTTGCTGCTCATGCAG	2059
Qy	641	TyrLeuCysArgGluTyrArgAspGlyAsnProArgValArgSerLeuValGlnAspThr	660
Db	2060	TACCTGTCCGAGGTACCCGATGGGAAACCCAGTGTGGCAGCCTGGTGGCAGGACACA	2119
Qy	661	ArgIleHisLeuValProSerLeuAsnProAspGlyTyrGluValAlaAlaGlnMetGly	680
Db	2120	CGCATCCACCTGGTGCCTCACTGAACCCCTGATGGCTACGAGGTGGCAGCGCAGATGGCC	2179
Qy	681	SerGluPheGlyAsnTrpAlaLeuGlyLeuTrpThrGluGluGlyPheAspIlePheGlu	700
Db	2180	TCAGAGTTTGGAACTGGGCGCTGGGACTGTGGACTGAGGAGGCGCTTGACATCTTTGAA	2239
Qy	701	AspPheProAspLeuAsnSerValLeuTrpGlyAlaGluAlaArgLysTrpValProTyr	720
Db	2240	GATTTCCGGATCTCAACTCTGTGCTCTGGGGAGCTCAGGAGAGGAATGGGTCCCCTAC	2299
Qy	721	ArgValProAsnAsnLeuProIleProGluArgTyrLeuSerProAspAlaThrVal	740
Db	2300	CGGGTCCCCAACTAATCTTGCCCATCCCTGAACGCTACCTTTTCGCCAGATGCCACGGTA	2359
Qy	741	SerThrGluValArgAlaIleAlaTrpMetGluLysAsnProPheValLeuGlyAla	760
Db	2360	TCCACGGGGTCCGGGCCATCATTTGCTGGATGGAGAGAAGAACCCCTTCGTGCTGGAGCA	2419
Qy	761	AsnLeuAsnGlyGlyGluArgLeuValSerTyrProTyrAspMetAlaArgThrProThr	780
Db	2420	AATCTGAACGGCGCAGCGGTAGTATCTTACCCCTACGATATGGCCGACGCGCTACC	2479

QY 781 GlnGluGlnLeuLeuAlaAlaAlaMetAlaAlaArgGlyGluAspGluAspGluVal 800
DB 2480 CAGAGCAGCTGCTGGCCGAGCATGGCAGCAGCCCGGGGGAGGATGAGGAGGCTC 2539
QY 801 SerGluAlaGlnGluThrProAspHisAlaIlePheArgTrpLeuAlaIleSerPheAla 820
DB 2540 TCGAGGCCGAGGAGACTCCAGACACCGCATCTTCGGTGGCTGTCATCTCTCTCGCC 2599
QY 821 SerAlaHisLeuThrLeuThrGluProTyrArgGlyGlyCysGlnAlaGlnAspTyrThr 840
DB 2600 TCGGCACACTCCTACCTGACCGAGCCCTACCGGGAGGCTGCCAAGCCAGGACTACAC 2659
QY 841 GlyGlyMetGlyIleValAlaGlyValAlaTyrAsnProArgThrGlyThrIleAsnAsp 860
DB 2660 GCGCGCATGGCATCGTCAACGGGGCAAGTGGACCCCGGAGCGGACTATCATGAC 2719
QY 861 PheSerTyrLeuHisThrAsnCysLeuGluLeuSerPheTyrLeuGlyCysAspLysPhe 880
DB 2720 TTCAGTTACCTGCATACCACTGCTGGAGCTCTCTTCTTACCTGGGCTGTGACAAAGTTC 2779
QY 881 ProHisGluSerGluLeuProArgGluTyrGluAsnAsnLysGluAlaLeuThrPhe 900
DB 2780 CCTCATGAGAGTGAAGTGGCCCGGAGTGGGAGAACCAAGAGGCGCTGCTCACCTTC 2839
QY 901 MetGluGlnValHisArgGlyIleLysGlyValValThrAspGluGlnGlyIleProIle 920
DB 2840 ATGAGCAGGTGCACCGCGCATTTAGGGGGTGGTGNACGACGACGACGATCCCAT 2899
QY 921 AlaAsnAlaThrIleSerValSerGlyIleAsnHisGlyValLysThrAlaSerGlyGly 940
DB 2900 GCCAACCGCCACCATCTCTGTGAGTGGCATTAATCAGCGCGTGAAGACGACGAGTGGT 2959
QY 941 AspTyrTrpArgIleLeuAsnProGlyGluTyrArgValThrAlaHisAlaGluGlyTyr 960
DB 2960 GATTACTGGCGAATCTGAACCGCGGTGATGCGGTGACGCGCCACGCGAGGGCTAC 3019
QY 961 ThrProSerAlaLysThrCysAsnValAspTyrAspIleGlyAlaThrGlnCysAsnPhe 980
DB 3020 ACCCGAGCGCCAGACCTGCATGTTGACTATGACATCGGGGCCACTGATGCACTTC 3079
QY 981 IleLeuAlaArgSerAsnTrpLysArgIleArgGluIleMetAlaMetAsnGlyAsnArg 1000
DB 3080 ATCTGGCTCGCTCCAACTGAGAGCATCCGGAGATCATGCGCATGAACGGGACCGG 3139
QY 1001 ProIleProHisLeuAspProSerArgProMetThrProGlnGlnArgLeuGlnGln 1020
DB 3140 CCTATCCACACATAGACCCCATCGGCCCTATGACCCCGCCACAGCGACCGCTGACGAC 3199
QY 1021 ArgArgLeuGlnHisArgLeuArgLeuArgAlaGlnMetArgLeuArgArgLeuAsnAla 1040
DB 3200 CGACGCTACAAACCCGCTCGGGCTTCGGGACACAGATGCGGTGCGGCGCCCTCAACGCC 3259
QY 1041 ThrThrThrLeuGlyProHisThrValProProThrLeuProProAlaProAlaThrThr 1060
DB 3260 ACCACACCCCTAGSCCCCACTGTGCTCCCTCCAGCGCTGCCCTGCGCCCTGCCACCC 3319
QY 1061 LeuSerThrThrIleGluProTrpTrpGlyLeuIleProProThrThrAlaGlyTrpGluGlu 1080
DB 3320 CTGAGCACTACCATAGACCTCGGGCTTCATACCGCCCAACCCCGCTGCTGGAGGAG 3379
QY 1081 SerGluThrThrThrThrThrGluValValThrGluPheGlyThrGluValGluProGlu 1100
DB 3380 TCGAGACTGAGACCTACACAGAGGTGTGACAGATTGGGACCGAGGTGGAGCCGCGAG 3439
QY 1101 PheGlyThrLysValGluProGluPheGluThrGlnLeuGluProGluPheGluThrGln 1120
DB 3440 TTTGGGACCAAGGTGGAGCCCGAGTTTGAGACCCAGTTGGAGCTGAGTTCGAGACCCAG 3499
QY 1121 LeuGluProGluPheGluGluGluGluGluGluGluGluGluGluGluGluGluGluGly 1140
DB 3500 CTGGAACCCGAGTTTGAGGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3559
QY 1141 GlnAlaPheProPheThrThrValGluThrThrValAlaAsnPheGlyAspPhe 1158

DB 3560 CAGGCATTCCTCTCACACAGTAGACACTACACAGTGAAGCTTTCGGGACTTC 3613
RESULT 4
BC038588
LOCUS
DEFINITION
IMAGE:5764769, complete cds.
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE
JOURNAL
PUBMED
REFERENCE
AUTHORS
TITLE
JOURNAL
REMARK
COMMENT
Contact: MGC help desk
Email: cgabs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural Sequencing Center (NISC), Gaithersburg, Maryland;
Web site: <http://www.nisc.nih.gov/>
Contact: nisc.mgc@nih.gov
Akhter, N., Ayala, K., Beckstrom-Sternberg, S.M., Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S., Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P., Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R., Maduro, Q.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C., McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W., Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L., Young, A., Zhang, L.-H. and Green, E.D.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Series: IRAK Plate: 79 Row: P Column: 19
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4755145.
Location/Qualifiers
1. .4125
BC038588 4125 bp mRNA linear PRI 30-JUN-2004
Homo sapiens AB binding protein 1, mRNA (cdna clone MGC:46180)
IMAGE:5764769, complete cds.
BC038588.1 GI:24047246
MGC.
Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 4125)
Straussberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Schacht, M., Soares, M.B., Donald, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Ustin, T.B., Toshlyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullah, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalón, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahy, J., Helton, E., Kettman, M., Madan, A., Rodriguez, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butlerfield, Y.S., Krzywinski, M.I., Skalska, U., Small, D.E., Scherch, A., Schein, J.E., Jones, S.D. and Marra, M.A.
human and mouse cDNA sequences
Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
2 (bases 1 to 4125)
Straussberg, R.
Direct Submission
Submitted (15-OCT-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA
NIH-MGC Project URL: <http://mgc.nci.nih.gov>
Contact: MGC help desk
Email: cgabs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural Sequencing Center (NISC), Gaithersburg, Maryland;
Web site: <http://www.nisc.nih.gov/>
Contact: nisc.mgc@nih.gov
Akhter, N., Ayala, K., Beckstrom-Sternberg, S.M., Benjamin, B., Blakesley, R.W., Bouffard, G.G., Breen, K., Brinkley, C., Brooks, S., Dietrich, N.L., Granite, S., Guan, X., Gupta, J., Haghighi, P., Hansen, N., Ho, S.-L., Karlins, E., Kwong, P., Laric, P., Legaspi, R., Maduro, Q.L., Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C., McDowell, J., Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W., Tsurgeon, C., Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L., Young, A., Zhang, L.-H. and Green, E.D.

US-10-131-831-1159/c
 ; Sequence 1159, Application US/10131831
 ; Patent No. 7026121
 ; GENERAL INFORMATION:
 ; APPLICANT: Wohlgemuth, Jay
 ; APPLICANT: Fry, Kirk
 ; APPLICANT: Woodward, Robert
 ; APPLICANT: LV, Ngoc
 ; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING
 ; TITLE OF INVENTION: TRANSPLANT REJECTION
 ; FILE REFERENCE: 506612000121
 ; CURRENT APPLICATION NUMBER: US/10/131,831
 ; PRIOR FILING DATE: 2002-08-05
 ; PRIOR APPLICATION NUMBER: US 10/006,290
 ; PRIOR FILING DATE: 2001-10-22
 ; PRIOR APPLICATION NUMBER: US 60/296,764
 ; PRIOR FILING DATE: 2001-06-08
 ; NUMBER OF SEQ ID NOS: 9190
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 1159
 ; LENGTH: 50
 ; TYPE: DNA
 ; ORGANISM: Homo sapiens
 ; US-10-131-831-1159

Query Match 8.1%; Score 19.6; DB 5; Length 50;
 Best Local Similarity 66.7%; Pred. No. 4.5e+03;
 Matches 28; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

QY 35 CTGGAGCTCCACCTCCCGCTGCTGCTCCTCCTGCTTTC 76
 |||||
 DB 50 CTGGCGCTTCCCTTCCAGTTACAGCCCGCTCTTTC 9

RESULT 7
 US-08-644-664B-35/c
 ; Sequence 35, Application US/08644664B
 ; Patent No. 5776746
 ; GENERAL INFORMATION:
 ; APPLICANT: Denney Jr., Dan W.
 ; TITLE OF INVENTION: Gene Amplification Methods
 ; NUMBER OF SEQUENCES: 42
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/644,664B
 ; FILING DATE: 01-MAY-1996
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: GENITOPE-00912
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 35:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 39 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-644-664B-35

Query Match 7.9%; Score 19.2; DB 2; Length 39;
 Best Local Similarity 75.0%; Pred. No. 5.6e+03;
 Matches 24; Conservative 0; Mismatches 8; Indels 0; Gaps 0;
 QY 211 TGTATCAGATACCCAACTAAACTGGATTCCAC 242
 |||||
 DB 37 TGAACAGATACGAACTAACTGGATTCCAC 6
 |||||
 RESULT 8
 US-08-761-277A-35/c
 ; Sequence 35, Application US/08761277A
 ; Patent No. 5972334
 ; GENERAL INFORMATION:
 ; APPLICANT: Denney Jr., Dan W.
 ; TITLE OF INVENTION: Vaccines For Treatment Of Lymphoma And
 ; TITLE OF INVENTION: Leukemia
 ; NUMBER OF SEQUENCES: 80
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/761,277A
 ; FILING DATE: 06-DEC-1996
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/644,664
 ; FILING DATE: 01-MAY-1996
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: MacKnight, Kamrin T.
 ; REGISTRATION NUMBER: 38,230
 ; REFERENCE/DOCKET NUMBER: GENITOPE-02406
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 35:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 39 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-761-277A-35

Query Match 7.9%; Score 19.2; DB 2; Length 39;
 Best Local Similarity 75.0%; Pred. No. 5.6e+03;
 Matches 24; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 211 TGTATCAGATACCCAACTAAACTGGATTCCAC 242
 |||||
 DB 37 TGAACAGATACGAACTAACTGGATTCCAC 6
 |||||

RESULT 9
 US-08-391-000-25
 ; Sequence 25, Application US/08391000
 ; Patent No. 5723752
 ; GENERAL INFORMATION:
 ; APPLICANT: HOUTZ, Robert L.
 ; TITLE OF INVENTION: CLONING AND DEVELOPMENTAL EXPRESSION OF
 ; TITLE OF INVENTION: PEA RIBULOSE-1,5-BISPHOSPHATE CARBOXYLASE/OXYGENASE LARGE
 ; TITLE OF INVENTION: SUBUNIT N-METHYLTRANSFERASE
 ; NUMBER OF SEQUENCES: 41